UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 03/17/2010

SMART & BIGGAR P.O. Box 2999, Station D 900-55 Metcalfe Street Ottawa, ON K1P 5Y6 CANADA EXAMINER
HUYNH, NAM TRUNG
ART UNIT PAPER NUMBER
2617

DATE MAILED: 03/17/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,991	10/17/2001	Bassam M. Hashem	71493-953/PW	4493

TITLE OF INVENTION: PACKET COMMUNICATION SYSTEM WITH DUAL CANDIDATE SETS FOR INDEPENDENT MANAGEMENT OF UPLINK AND DOWNLINK TRANSMISSIONS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/17/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further c indicated unless corrected maintenance fee notificati	form should be used to correspondence including d below or directed others	for transmitting the ISS ing the Patent, advance of nerwise in Block 1, by (UE FEE and PUBLICATI orders and notification of n (a) specifying a new corres	ON FEE (if require naintenance fees will pondence address; a	ed). Blocks 1 through 5 Il be mailed to the curre and/or (b) indicating a se	should be completed where nt correspondence address as parate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
SMART & BIG P.O. Box 2999, S 900-55 Metcalfe	tation D Street	72010	Lhe	Certi	ficate of Mailing or Tra		
Ottawa, ON K1P CANADA	516					(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/977,991	10/17/2001		Bassam M. Hashem		71493-953/PW	4493	
TITLE OF INVENTION UPLINK AND DOWNLI			WITH DUAL CANDIDAT	E SETS FOR INI	DEPENDENT MANAGE	MENT OF	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DU	JE DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/17/2010	
EXAMI	NER	ART UNIT	CLASS-SUBCLASS				
HUYNH, NA	M TRUNG	2617	455-525000				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTOVSB/1/22) attached. "Fee Address" indication (or "Fee Address" Indication form PTOVSB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attorney.	For printing on the patent front page, list the names of up 0.3 registered patent attorneys tigents OR, alternatively, the name of a single firm (having as a member a 2 sistered attorney or agent) and the names of up to guitered patent attorneys or agents. If no name is 3 4, no name will be printed.			
	ess an assignee is ident in 37 CFR 3.11. Comp	ified below, no assignee sletion of this form is NC	(B) RESIDENCE: (CITY	ntent. If an assigned assignment. and STATE OR CO	OUNTRY)	document has been filed for	
4a. The following fee(s) at Issue Fee Publication Fee (No	o small entity discount p		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is attached.		
	SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no long				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if requeords of the United Sta	uired) will not be accepte tes Patent and Trademar	ed from anyone other than the Office.	ne applicant; a regist	ered attorney or agent; or	the assignee or other party in	
Authorized Signature				Date			
Typed or printed name				Registration No			
This collection of informa an application. Confidenti submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	tion is required by 37 C iality is governed by 35 application form to the ons for reducing this bur reginia 22313-1450. DC 3-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the ONOT SEND FEES OR	ion is required to obtain or r 1.1.4. This collection is est y depending upon the indiv he Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 mi idual case. Any con r, U.S. Patent and T O THIS ADDRESS.	e public which is to file (s inutes to complete, includent ments on the amount of rademark Office, U.S. Do SEND TO: Commissione	and by the USPTO to process) ling gathering, preparing, and time you require to complete epartment of Commerce, P.O. er for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



CANADA

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

ess: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/977,991	10/17/2001	Bassam M. Hashem	71493-953/PW	4493	
75	90 03/17/2010	EXAMINER			
SMART & BIGGAR			HUYNH, NAM TRUNG		
P.O. Box 2999, Sta		ART UNIT	PAPER NUMBER		
900-55 Metcalfe Street Ottawa, ON K1P 5Y6			2617 DATE MAILED: 03/17/2010		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1026 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1026 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 09/977 991 HASHEM ET AL. Notice of Allowability Framiner Art Unit NAM HUYNH 2617 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to Amendment filed 12/22/09. The allowed claim(s) is/are 1-15. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: a) \square All 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) I including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 6. Interview Summary (PTO-413), Notice of Draftperson's Patent Drawing Review (PTO-948) Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). T Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/George Eng/

Supervisory Patent Examiner, Art Unit 2617

Application/Control Number: 09/977,991

Art Unit: 2617

DETAILED ACTION

Response to Amendment

 This office action is in response to amendment filed on 12/22/09. No amendments were made to previously presented claims 1-15.

Allowable Subject Matter

- Claims 1-15 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

The invention of the present application pertains to selection of optimum base stations in a communication system that employs candidate sets and active sets. The novelty of the claimed invention lies in the combination of the steps performed for selecting at least one optimum base station to communicate with a terminal. The concept of storing an uplink candidate set listing at least one candidate uplink base station; storing a downlink candidate set listing at least one candidate downlink base station; determining a predominant direction of traffic with respect to the terminal; if the predominant direction of traffic is in an uplink direction, selecting at least one optimum base station from the uplink candidate set; and if the predominant direction of traffic is in a downlink direction, selecting at least one optimum base station from the downlink candidate set is neither taught nor suggested by the prior art. Accordingly, Applicant's claims are allowed for these reasons and for the reasons recited by Applicant in the amendment filed on 12/22/09.

Application/Control Number: 09/977,991

Art Unit: 2617

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 09/977,991

Art Unit: 2617

/George Eng/ Supervisory Patent Examiner, Art Unit 2617

/Nam Huynh/ Examiner, Art Unit 2617